

**Fig. 1**

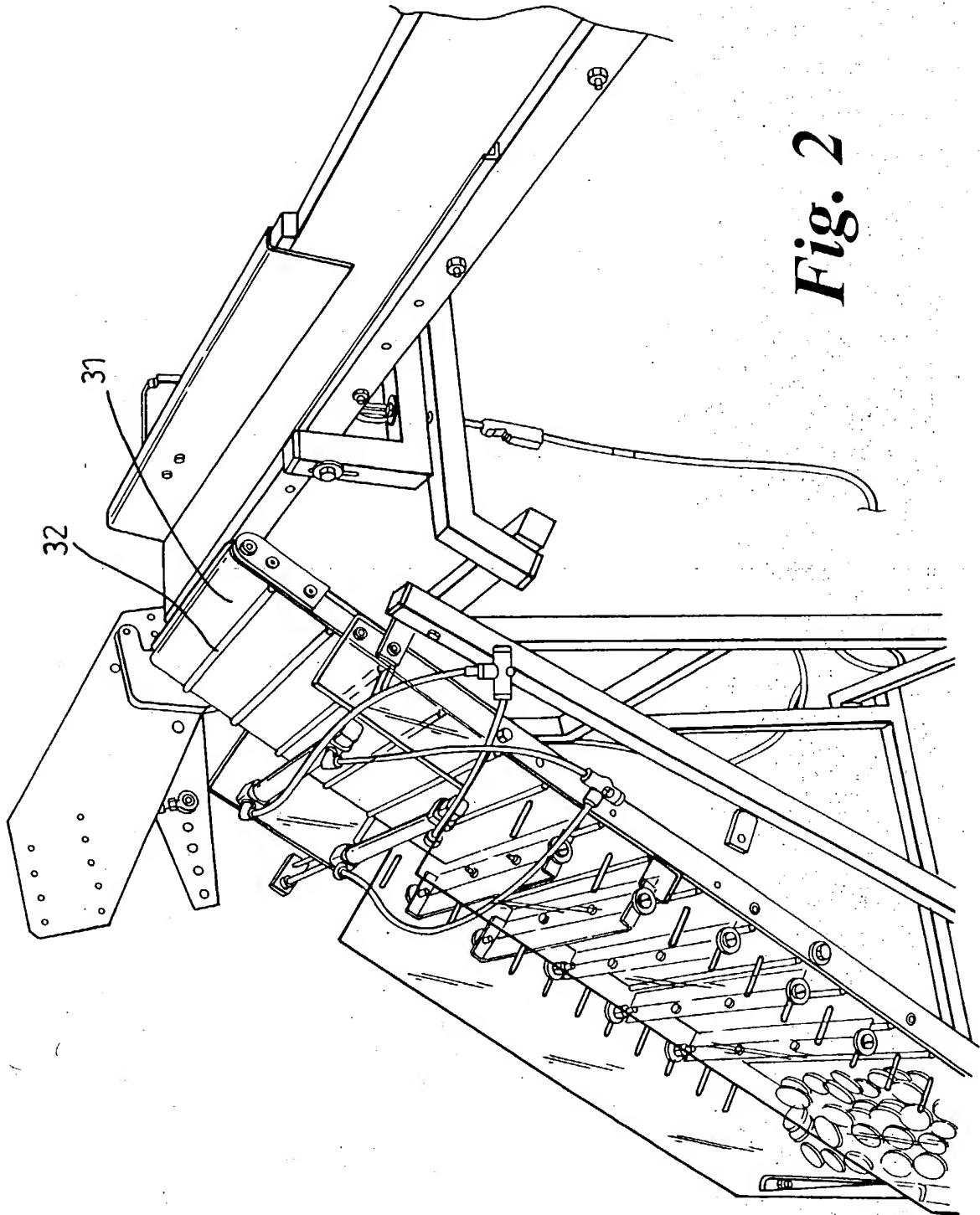
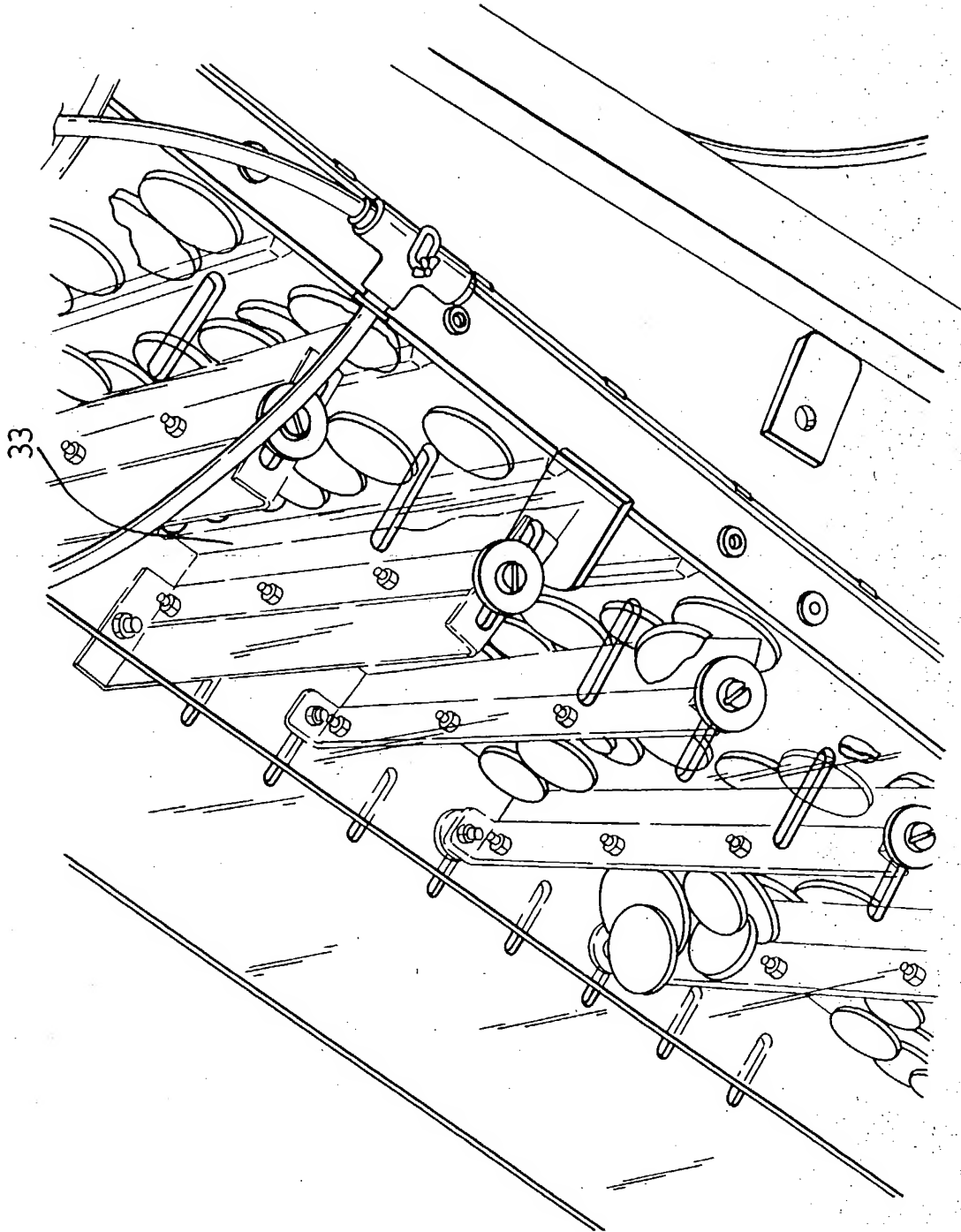
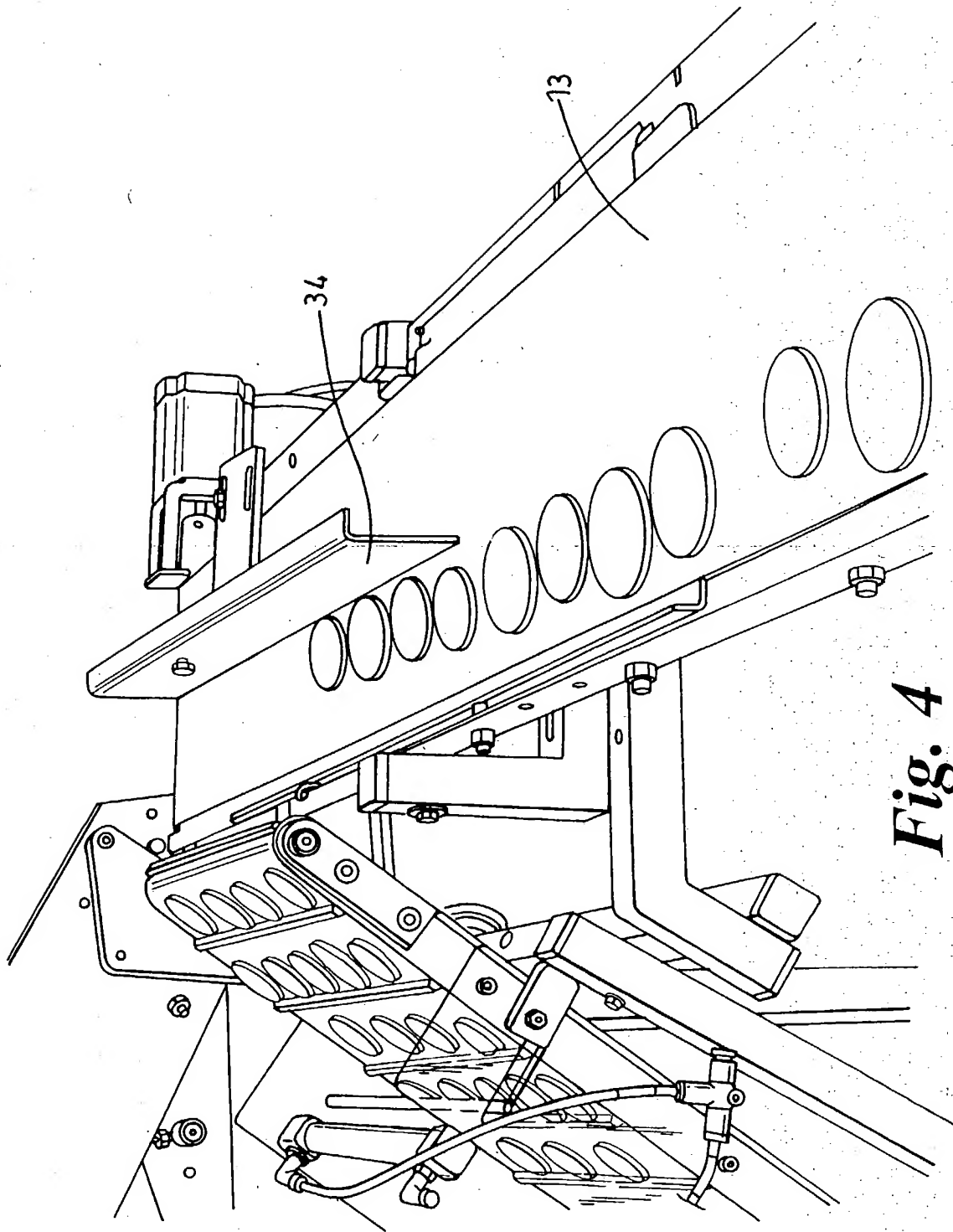


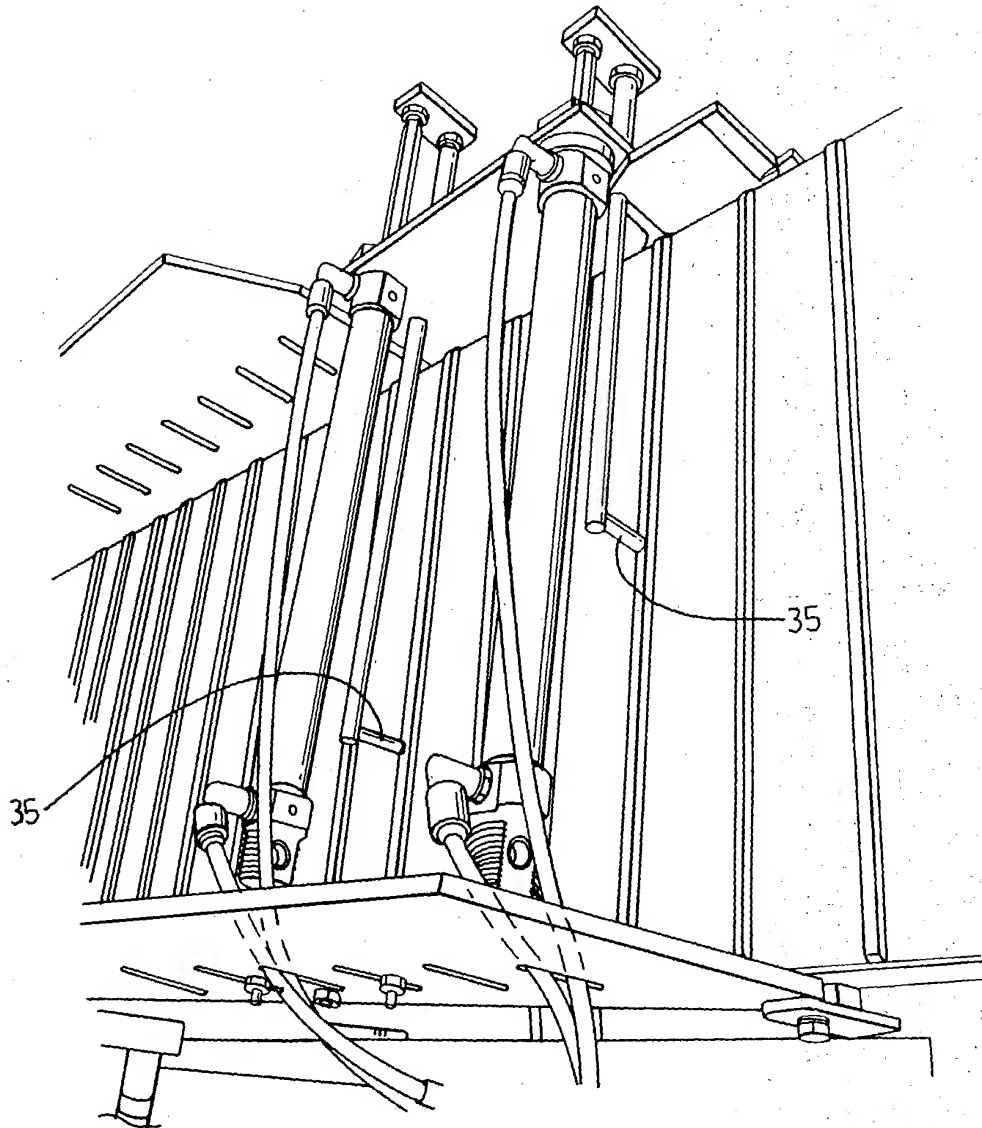
Fig. 2



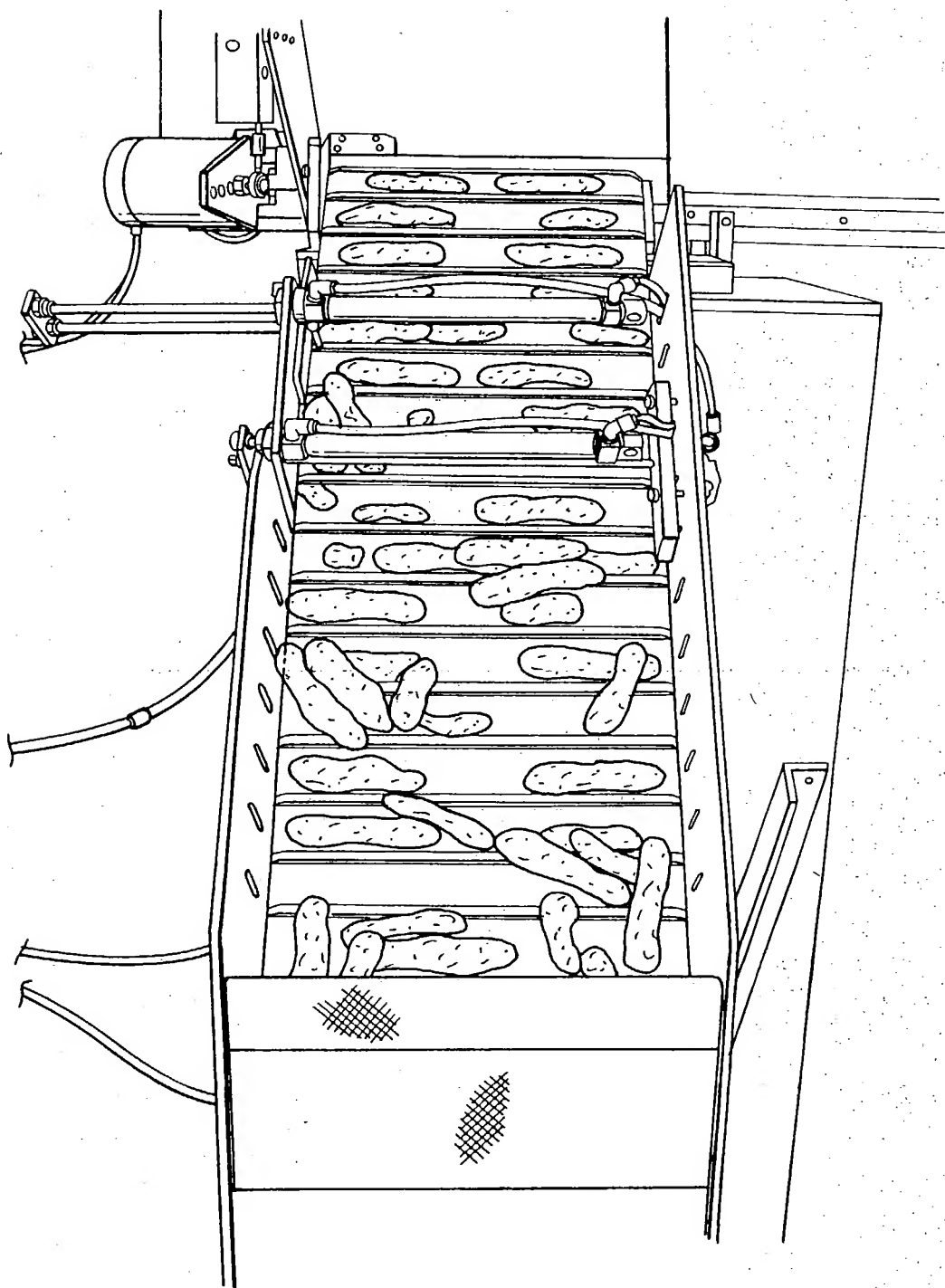
**Fig. 3**



**Fig. 4**



**Fig 5**



***Fig. 6***

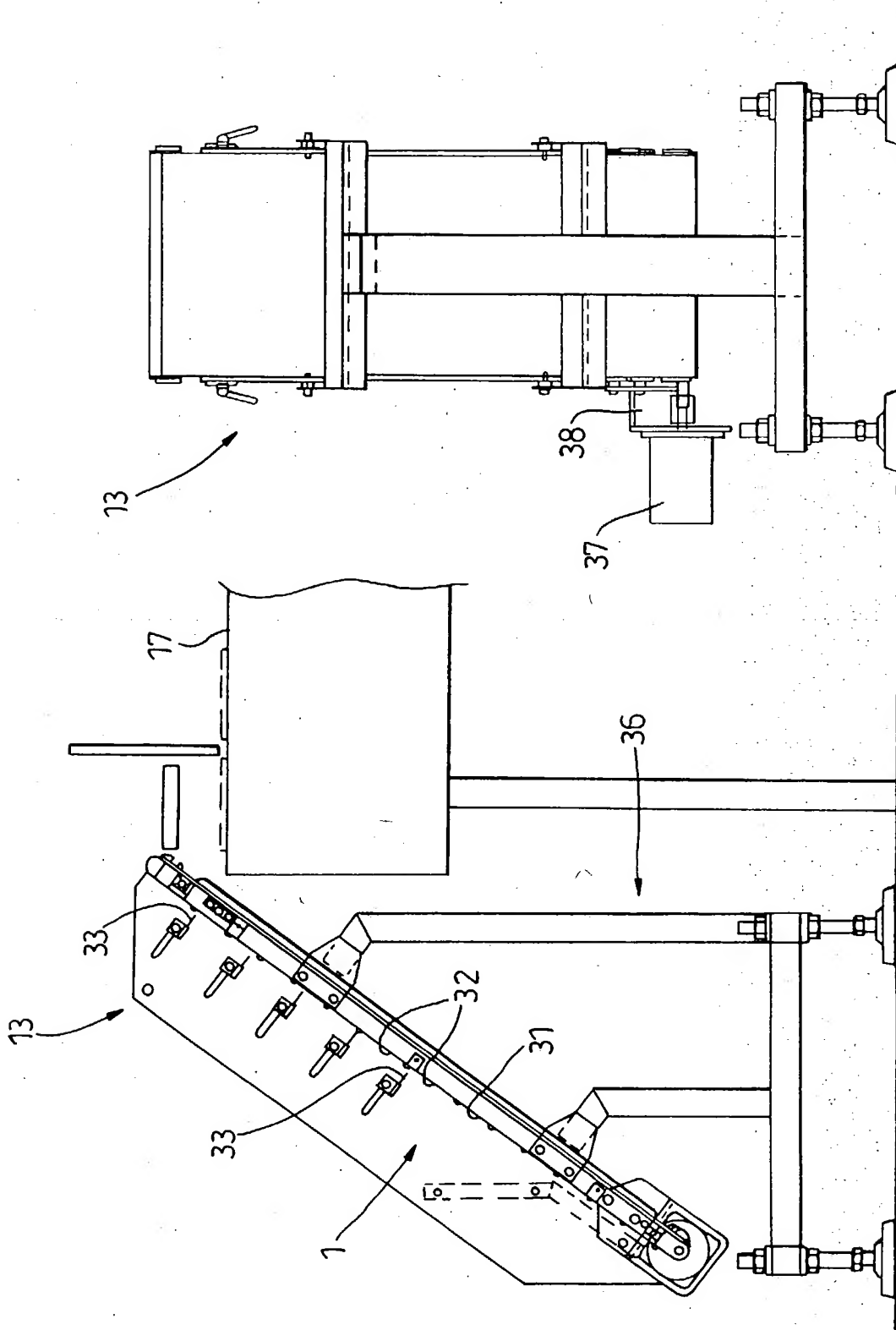


Proof of principle specification 11-03-02

Module	Belt/conveyor detail	Stat detail	Angle to horizontal	Scraper detail	Scraper to belt distance mm	Acceleration mm/sec/sec.	Height from top of singulator belt to axis 1 surface	Hopper	Input end roller DIA	Discharge end roller DIA
Singulator conveyor										
Cucumber	300mmx2280mm x1.2mm habasit FNB-SE	4.0mm Hx 6mm W, 60mm pitch	52.5deg	20mm deep continuous strip polypropylene sheet 0.015in thick	6,5,5,5,5	14500	10mm	RIMEX vertical rear wall	Any	24mm
Tomato	300mmx2280mm x1.2mm habasit FNB-SE	4.0mm Hx 6mm W, 60mm pitch	52.5deg	20mm deep continuous strip polypropylene sheet 0.015in thick	8,7,7,7,7	14500	10mm	RIMEX vertical rear wall	Any	24mm
Sausage	300mmx2280mm x1.2mm habasit FNB-SE	4.5mm Hx 6mm W, 45.6mm pitch	52.5deg	no scrapers, 2 air operated deflectors stroke 200mm		11300	10mm	RIMEX vertical rear wall	Any	24mm
Module	Belt/conveyor detail	Stat detail	Angle to horizontal	Scraper detail	Scraper to belt distance mm	Acceleration mm/sec/sec.	Height from top of singulator belt to axis 1 surface	Hopper	Input end roller DIA	Discharge end roller DIA
AXIS 1	120mm wide x350mm long x0.8mm Habasit FAB-5ER	N/A	Horizontal	N/A	N/A	4100			any	8.0mm
Pusher	N/A			Pusher blade to align slices prior to grabbing	1-2mm	4100	N/A		N/A	N/A
AXIS 2	120mm wide x350mm long x0.8mm Habasit FAB-5ER	N/A	Horizontal		N/A	4100	N/A		20mm	8.0mm
Module	Belt/conveyor detail	Stat detail	Angle to horizontal	Scraper detail	Scraper to belt distance mm	Acceleration mm/sec/sec.	Height from top of singulator belt to axis 1 surface	Hopper	Input end roller DIA	Discharge end roller DIA
AXIS 3	60mm wide x250mm long x0.8mm Habasit FAB-5ER	N/A	Horizontal	N/A	N/A	4100	N/A		20mm	8.0mm
AXIS 4	60mm wide x250mm long x0.8mm Habasit FAB-5ER	N/A	Horizontal	N/A	N/A	4100	N/A		20mm	8.0mm
AXIS 5	Linear unit moving Axis3 and 4, 120mm stroke	N/A	Horizontal	N/A	N/A	4100	N/A		N/A	N/A
AXIS 6	120mm wide x295mm long x0.8mm Habasit FAB-5ER	N/A	7.5	N/A	N/A	4000Accn 2000Decn	N/A		20mm	8.0mm
Camera	DT/Hachi KP-3 Camera 600mm above conveyor	N/A								
Other considerations	Facility for second camera to record placement performance and feedback. Conveyor cleaning, pip removal, Container for									

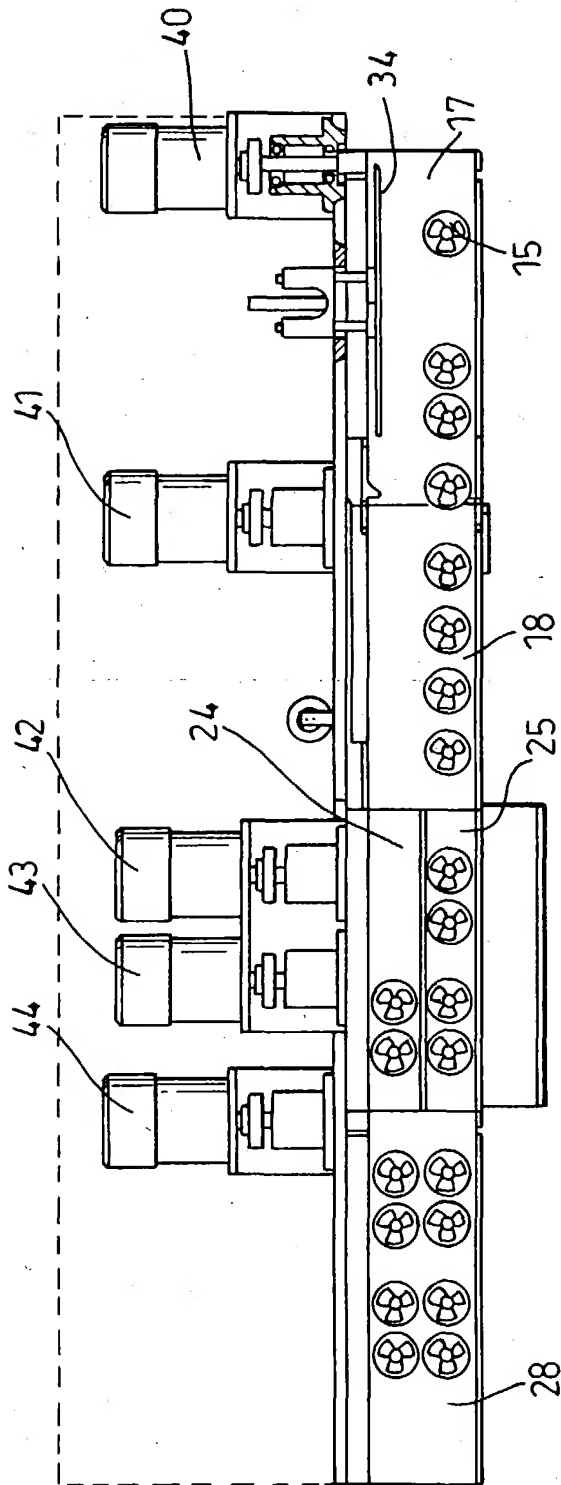
*Fig 8*



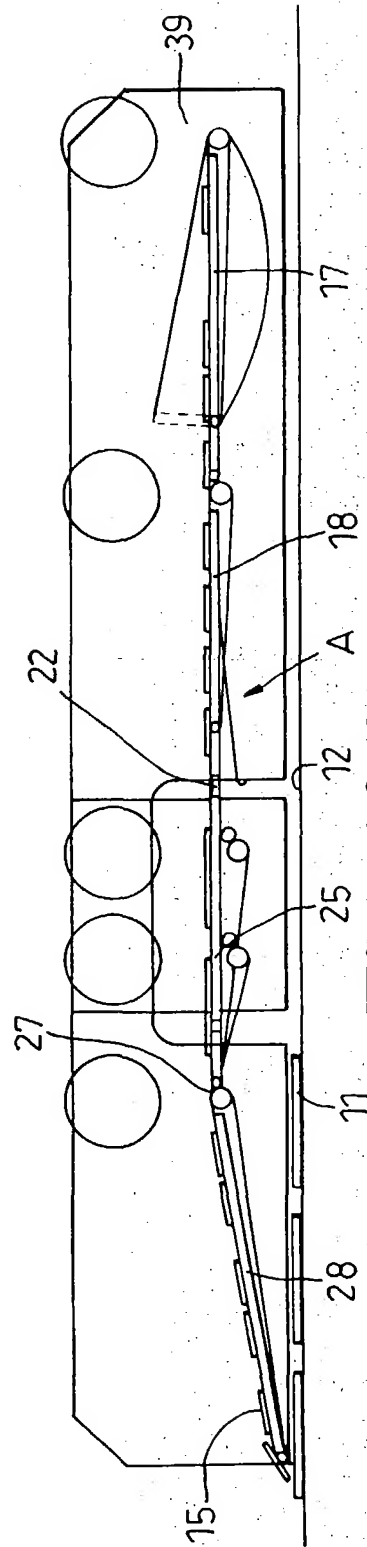


*Fig. 9(b)*

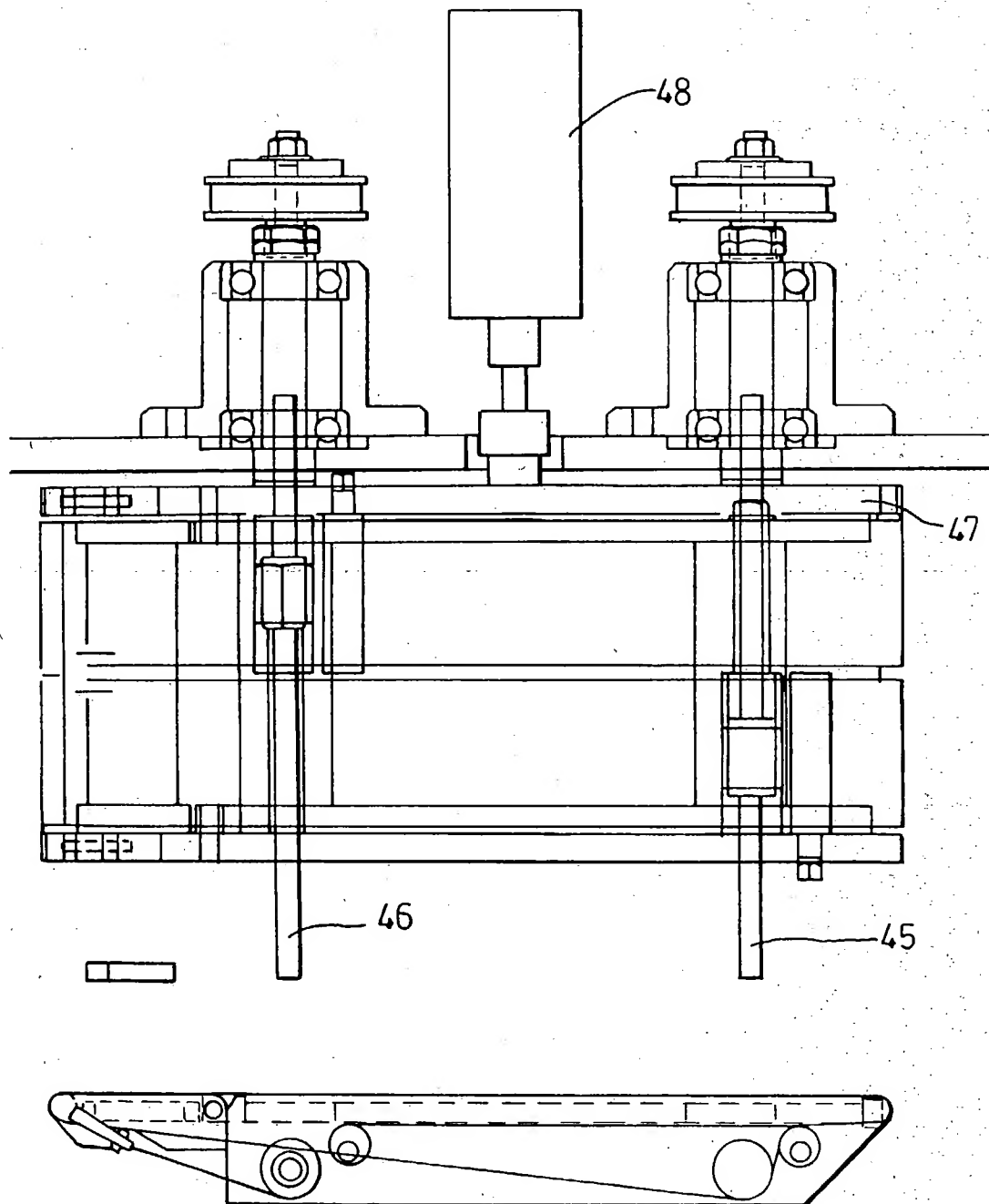
*Fig. 9(a)*



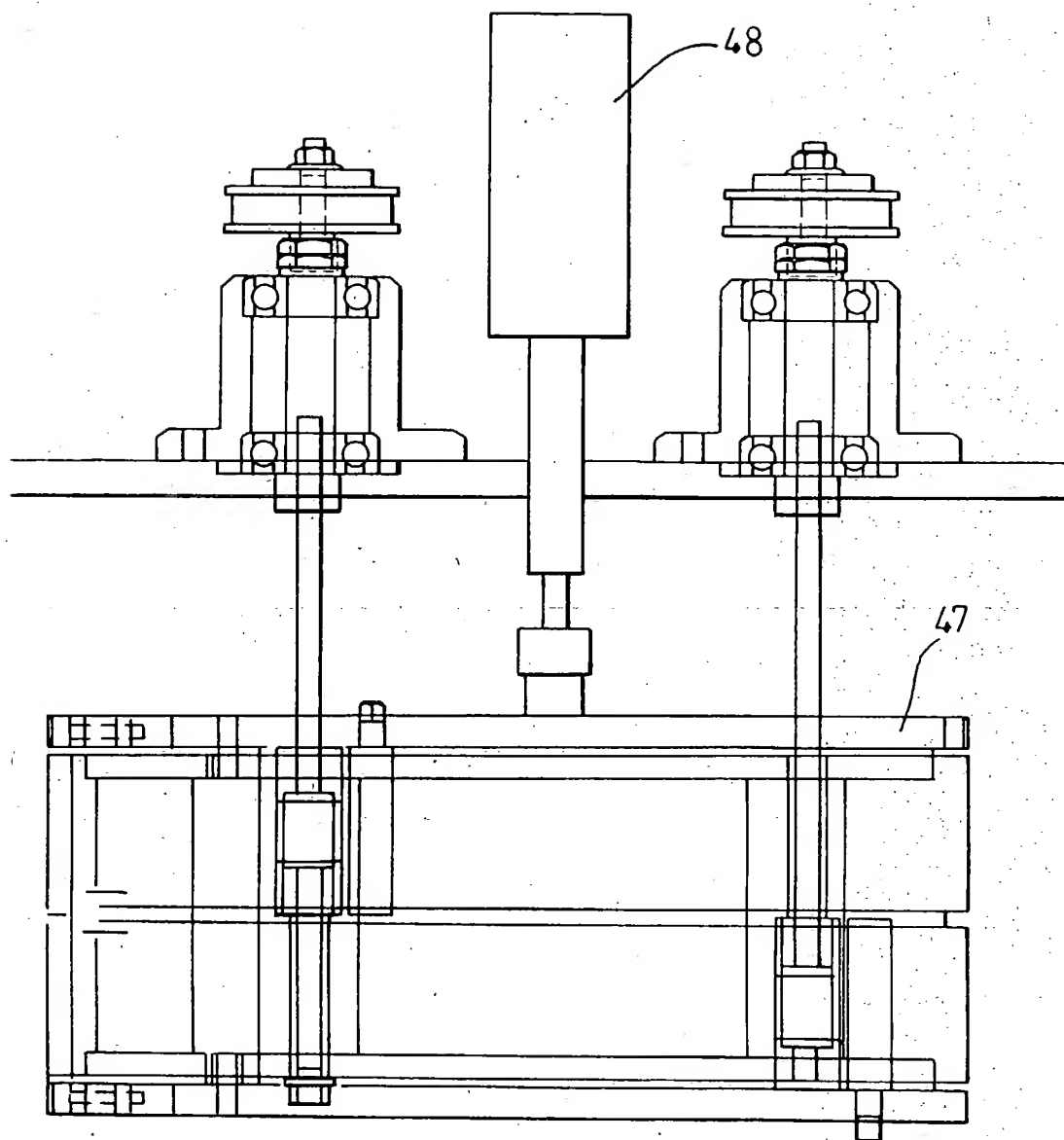
**Fig. 10(a)**



**Fig. 10(b)**



*Fig 11*



*Fig. 12*